



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Large Application of: **Debra R. Reinhart et al.**

Serial No.: **10/701,412**

Docket No.: **KSC-12246-2**

Filed: **10/31/2003**

Examiner Katherine W. Mitchell

For: **Zero-Valent Metal Emulsion
for Reductive Dehalogenation
of DNAPLs**

Art. Unit: 3677

DECLARATION OF DAVID MAJOR, Ph.D.

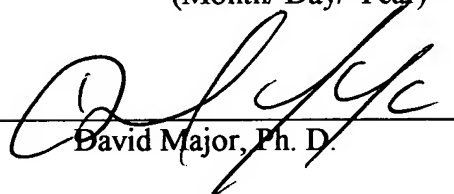
I am David Major, Ph.D. and I Declare that to the best of my knowledge and belief the following is true:

1. I am Dr. David Major and at the time of the invention in question, I was an employee of GeoSyntec Consultants, Inc. a small business having a Collaborative Research Agreement with the University of Central Florida to support the ongoing investigation by injecting the emulsion into test wells.
2. That under contract NAS10-01026 between NASA-KSC, GeoSyntec and the University of Central Florida, an investigation was made for way to effectively treat dense non-aqueous phase liquid (DNAPL) sources found in ground water. As a result of this investigation, Jacqueline Quinn, a NASA employee, along with the co-inventors listed on U.S. Patent Application Serial Number 10/701,412, Debra Reinhart, Christian Clausen, Cherie Geiger and Kathleen Brooks invented what they consider to be a new and unobvious zero-valent metal emulsion and a method of utilizing the newly invented emulsion for remediating a halogenated solvent.

3. The inventors listed on the Declaration filed with the subject U.S. Patent Application are the only true inventors of the invention described therein.
4. I was listed as an author on a paper presented at the International Containment Conference, "The In Situ Treatment of DNAPL with Zero-Valent Iron Emulsions", which paper also included a number of authors that were also inventors of the invention covered by U.S. Patent Application Serial Number 10/701,412. However, I did not contribute in any way to the final concept of the invention disclosed and claimed in U.S. Patent Application Serial Number 10/701,412 or the paper entitled "The In Situ Treatment of DNAPL with Zero-Valent Iron Emulsions". For that reason, I was rightfully not listed as an inventor of the U.S. Patent Application Serial Number 10/701,412 as filed and currently pending in the United States Patent and Trademark Office.

I declare under the laws of the United States of America that the foregoing is true and correct.

Executed on 5 5 2005
(Month/ Day/ Year)


David Major, Ph. D.



Witness by
Th. A. Krug



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Re Application of: **Debra R. Reinhart et al.**

Serial No.: **10/701,412**

Docket No.: **KSC-12246-2**

Filed: **10/31/2003**

Examiner Katherine W. Mitchell

For: **Zero-Valent Metal Emulsion
for Reductive Dehalogenation
of DNAPLs**

Art. Unit: 3673

DECLARATION OF JACQUELINE W. QUINN, Ph.D.

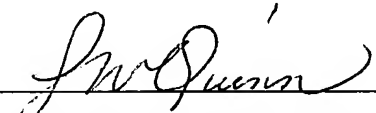
I am Jacqueline Quinn, Ph.D. and I Declare that to the best of my knowledge and belief the following is true:

1. I am an environmental engineer and research scientist with NASA Kennedy Space Center. In my current position, I am responsible for the development and testing of new and evolving groundwater treatment technologies that may have application to NASA Centers where contamination persists in the environment.
2. That under contract NAS10-01026 with GeoSyntec and the University of Central Florida, an investigation was made for ways to effectively treat dense non-aqueous phase liquid (DNAPL) sources found in ground water. As a result of this investigation, I along with the co-inventors listed on U.S. Patent Application Serial Number 10/701,412, invented a new and unobvious zero-valent metal emulsion and a method of utilizing the newly invented emulsion for remediating a halogenated solvent.
3. The inventors listed on the Declaration filed with the subject U.S. Patent Application are the only true inventors of the invention described therein.
4. Dr. David Major, at the time of the invention, was an employee of GeoSyntec Consultants, Inc. a small business having a Collaborative Research Agreement with the University of Central Florida to support the ongoing investigation by injecting the emulsion into test wells. His participation further included supervising the engineering plans and permits required by the state of Florida prior to injecting any "solution" into the drinking water aquifer. Because of his contribution, Dr. Major was listed as an author on a paper presented at the

International Containment Conference, "The In Situ Treatment of DNAPL with Zero-Valent Iron Emulsions". Dr. Major did not contribute in any way to the concept of the invention disclosed in U.S. Patent Application Serial Number 10/701,412 or the paper entitled "The In Situ Treatment of DNAPL with Zero-Valent Iron Emulsions". For that reason, Dr. Major was rightfully not listed as an inventor of this invention.

I declare under the laws of the United States of America that the foregoing is true and correct.

Executed on 03/14/05
(Month/ Day/ Year)


Jacqueline W. Quinn, Ph.D.

STATE OF FLORIDA

COUNTY OF Broward

Sworn to (or affirmed) and subscribed before me this 14 day, of
March, 2005, by Jacqueline W. Quinn.

Carol Anne Dunn
MY COMMISSION # DD269801 EXPIRES
December 9, 2007
BONDED THRU TROY FAIR INSURANCE, INC.

